ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
Bruhat Bengaluru Mahanagara Palike

DETAILED PROJECT REPORT

CONSULTING SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT FOR

Name of Work: Developments of roads and drains at Machohalli, Kadabagere, Gollarahatti (Kittanahalli), Singanayakanahalli Grama Panchayathi limits and surrounding areas of Yelahanka assembly Constituency Under Amrutha Nagarothana Grants

COST OF THE PROJECT: 1600.00 LAKHS

Submitted To:
The EXECUTIVE ENGINEER,
Yelahanka Project Division,
BBMP, Bangalore.

NEWZEN CONSULTANTS BANGALORE
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Chapter – 4 Design & Proposals

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Annexure A.5.1 Detailed Cost Estimate, Rate Analysis

Photos

Typical Cross Sections

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Chapter -1
INTRODUCTION

1.1.1 Bengaluru is the capital of India's southern Karnataka state. The center of India's high-tech industry, the city is also known for its parks. It is also known as the Garden City because of its many beautiful gardens and parks. By Cubbon Park, Vidhana Soudha is a Neo-Dravidian legislative building. Former royal residences include 19th-century Bangalore Palace, modeled after England's Windsor Castle, and Tipu Sultan's Summer Palace, an 18th-century teak structure.During the last couple of decades, city has witnessed drastic increase in population, change in land use pattern of the city, life style of the people and their commuting habits and the revolutionary changes that has taken place in the automobile industry. This has contributed to the growth of vehicular traffic in an enormous way.

1.1.2 It also called the Silicon Valley of India , because of the high concentration of IT industry. Bangalore is rated to one of the fastest growing cities in Asia with a current population of more than 10 million. During the last couple of decades, city has witnessed drastic increase in population, change in land use pattern of the city, life style of the people and their commuting habits and the revolutionary changes that has taken place in the automobile industry.

1.1.3 The Bangalore city population is currently more than 11 million and increasing in a forward march. The lifestyle of the citizens is changing day to day due to globalization and introducing of new brands in all sector. Bangalore, the fastest growing city of India, comprises of a dynamic blend of people, belonging to various religions, castes and communities. With the introduction of information technology in the city, it has assumed an international character. IT professionals not only from the various parts of India, but also that of the world, are migrating to the city. This has led to Bangalore becoming more like the melting pot of various cultures. Read on to know more about the people and lifestyle of Bengaloora, India. What adds to the traffic pressure in Bangalura in particular is that there is very little scope for expansion of roads and the need to use existing roads for smooth movement of vehicles is even more pronounced. It thus becomes mandatory for the administration to ensure better parking facilities. So far, the government and the BBMP have not taken this issue seriously and now the situation is such that it needs to be addressed seriously and effectively. Rapid population growth because of IT and other associated industries in Bengaluru led to an increase in the vehicular population to about 1.5 million, with an annual growth rate of 7-10%. With the increase in population and the expansion of the city, the problem of connectivity of the populace has arisen. Quite obviously personalized modes of transport have grown at a tremendous rate and two wheelers along with the cars

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almost comprise 90% of the total registered vehicular population in the city. Two wheelers constitute more than 70% of the total volume, while cars comprise 15%, autos 4% and the remaining 8% includes other vehicles such as buses, vans and tempos.

1.1.4 The combined effect of all these on the road network of Bangalore is delay and congestion beyond tolerable limits. Vehicular conflicts at the intersections are being eliminated by traffic signals but at the expense of delays and long queues. The peak hour has spread over a longer period of time, since there are no perceptible capacity augmentation / conflict reduction measures.

1.1.5 As a comprehensive development programme for improvement of road network, the Bruhath Bangalore Mahanagara Palike (BBMP) has planned Improvements to Junction, widening / Improvements of roads, strengthening of pavement base and sub - base, improvement to pedestrian facilities, improvements to Drainage Facility, etc. This response is the answer to the severe strain on the urban infrastructure, which is inevitable due to the very rapid rate of growth in traffic. Travel demands of passengers have increased many folds in the last two decades. Unfortunately growth in the infrastructure is not commensurate with the growing demands of traffic. There is an exigent need to effectively manage the traffic and transportation systems to optimize the solutions with short term afid long - term measures.

1.2 Project Location

The Project includes Developments of roads and drains at Machohalli, Kadabagere, Gollarahatti (Kittanahalli), Singanayakanahalli Grama Panchayathi limits and surrounding areas of Yelahanka assembly Constituency Under Amrutha Nagarothana Grants. The Project area is falls under Yelahanka Division, Yelahanka Assembly Constituency in Bangalore City. The Project area is located thickly populated Residential area. For the habitation resided in this area it was very difficult to commute on this stretch in the Rainy season due to non proper flow of water on the Roads and lack of proper drainage facility. By considering these reasons the roads are taken up for Development with Asphalting or White topping depending upon the site scenario.

Key Map of the roads proposed is enclosed in **Annexure A.1.1.**

M/s. NEWZEN CONSULTANTS BANGALORE is entrusted by BBMP to carry out the work of Preparation of Detailed Estimate and Report for the above said work.

Accordingly we **M/s. NEWZEN CONSULTANTS BANGALORE** have commenced the consultancy works as per the scope of services described in the RFP document.

1.3 Scope of Work

The Scope of Services of the Consultancy includes the following:

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Inventory and condition surveys for existing road & pavement, cross drainage structures and bridges.

- Engineering surveys and investigations
- Improvement to the existing pavement and drains, such as horizontal and vertical alignment, curve straightening, rising of the road level in low lying areas above the HFLs, concentric widening / eccentric widening etc.
- Design of Pavement.
- Overlay Design.
- Design of lateral side drains and Cross drainage works such as culverts etc
- Rate analysis of scheduled items, BOQ and Cost estimates.
- Final Detailed Project Report and final drawings
- Photos of the project roads or site

1.4 Contents of the Report

The Methodology, as detailed in the Project proposal, it has been followed for carrying out the necessary Investigations and for the Preparation of Detailed Estimate and Report.

This Report includes the following.

- Chapter 2: Investigation & Surveys
- Chapter 3: Design Standard & Specification
- Chapter 4: Design & Proposals
- Chapter 5: Project Cost Estimates
- Chapter 6: Executive Summary

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CC Road	
RCC Drain	

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Plan Copy
J.K. Nandini 15/06/2022

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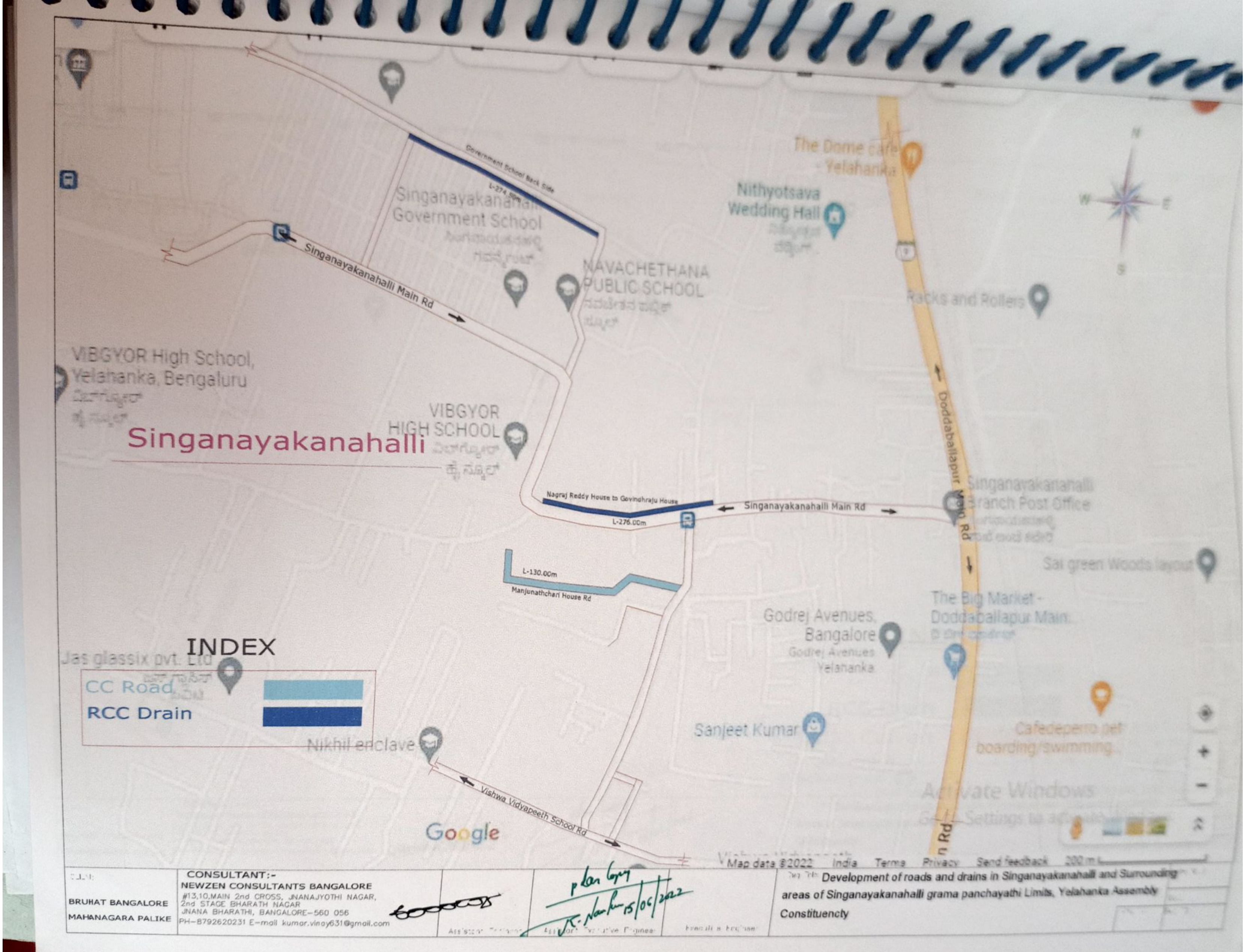

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15/06/2022

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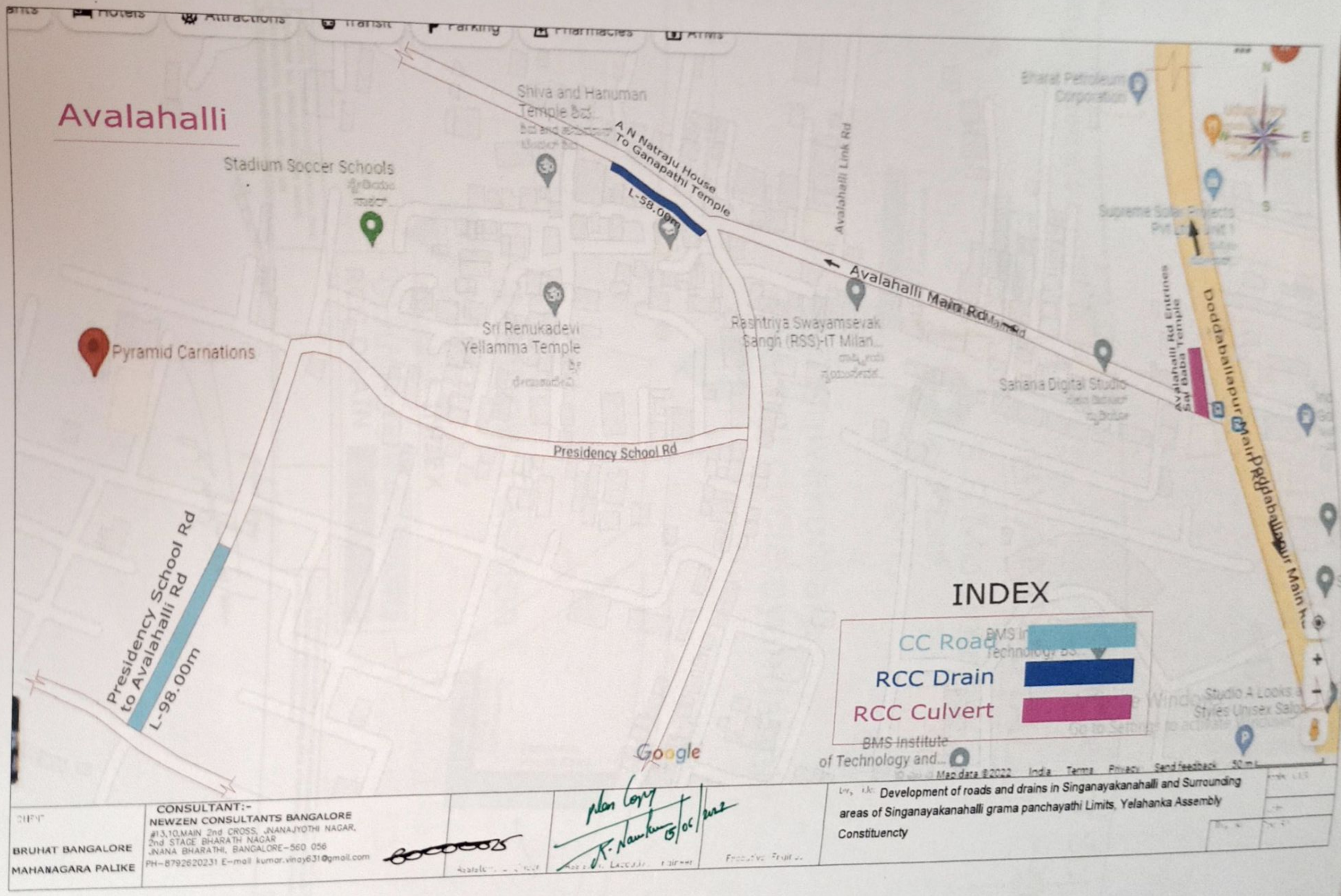

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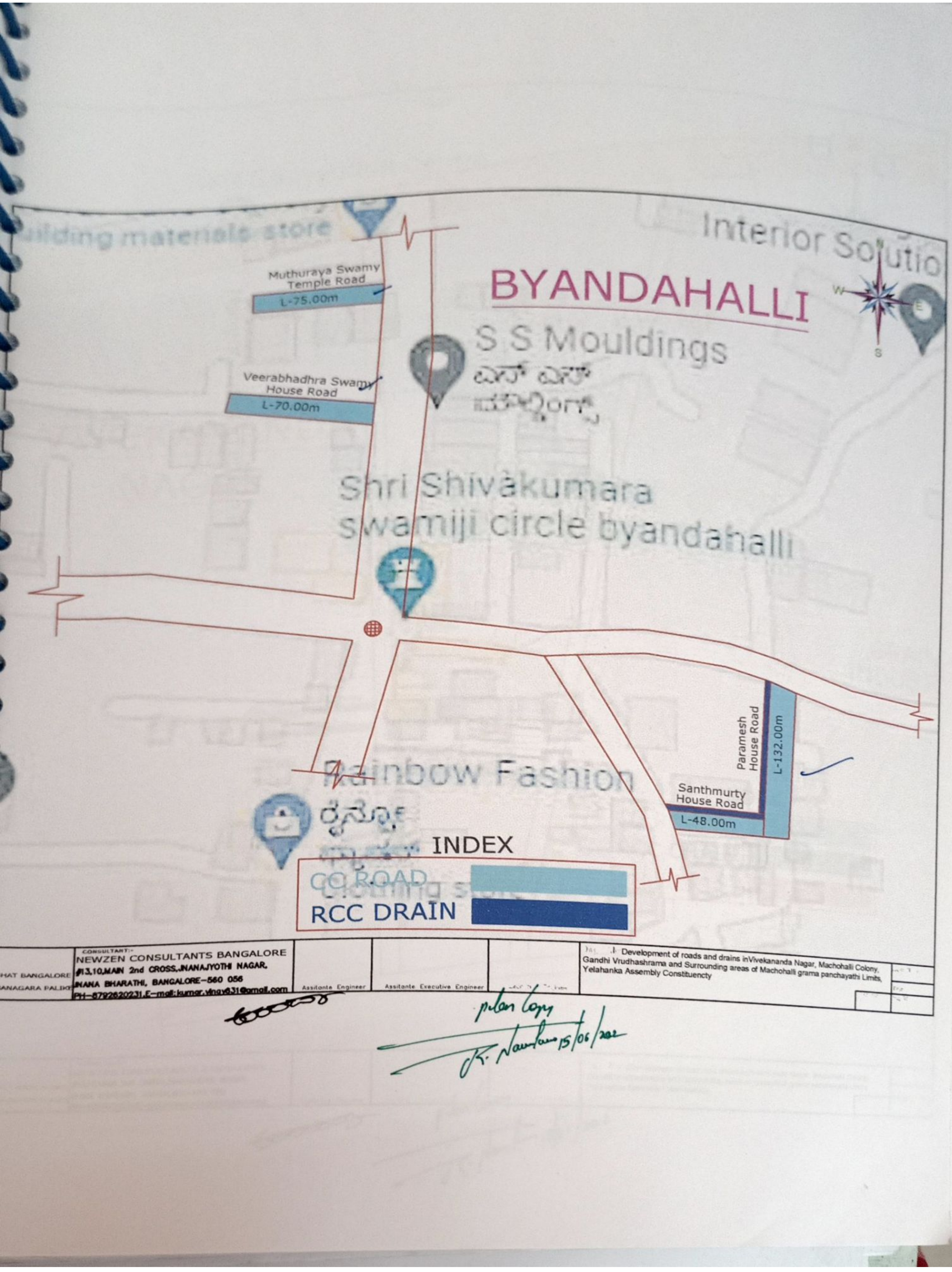

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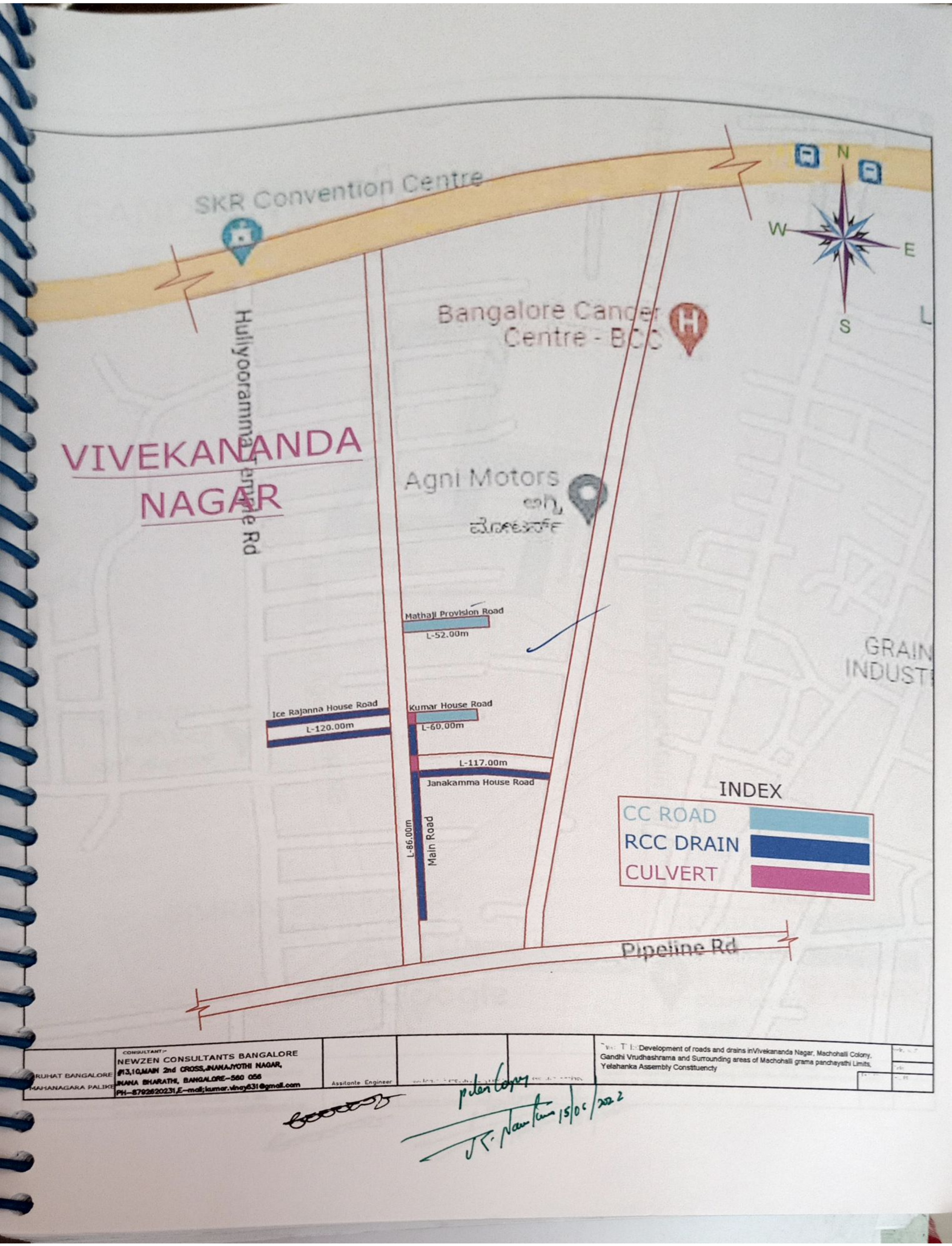

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GANDHI VRUDHASHRAMA

N

W

E

S

Vachchanahalli 2nd Stage Main Rd

L-44.00m

Murugamma House Road

L-45.00m

Sunil House Road

L-72.00m

Shivaraj House Road

L-48.00m

L-48.00m

Bhagyamma House Road

R.O Plant

Beside Road L-92.00m

Gandhi Old Age Home Rd

C T Ramanna House Road

L-87.00m

L-87.00m

Old Age Home

SIMRAN STATIONERY AND MOBILE

Google

INDEX

CC ROAD

RCC DRAIN

CULVERT

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BETTAHALLI

N
W
E
S

Halina Mane
Dairy Farm (P)
ಹಾಲಿನ ಮನೆ ಡೈರಿ
ಫಾರ್ಮ್ (ಪಿ)

a temple

Main Road
Main Road
L-150.00m
L-550.00m

INDEX

CC ROAD

Google

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AVERAHALLI

BRUHAT BANGALORE MAHANAGARA PALIKE	CONSULTANT:- NEWZEN CONSULTANTS BANGALORE #13,10,MAIN 2nd CROSS,JNANAJYOTHI NAGAR, JNANA BHARATHI, BANGALORE-560 056 PH-8792620231,E-mail;kumar.vinay631@gmail.com			Development of roads and drains in Gollarahatti and Surrounding areas of Gollarahatti grama panchayathi Limits, Yelahanka Assembly Constituency

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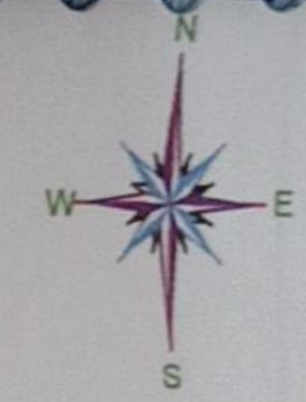
RAHUTHNAHALLI



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Development of roads and drains in Gollarahatti and Surrounding areas of Gollarahatti grama panchayathi Limits, Yelahanka Assembly Constituency

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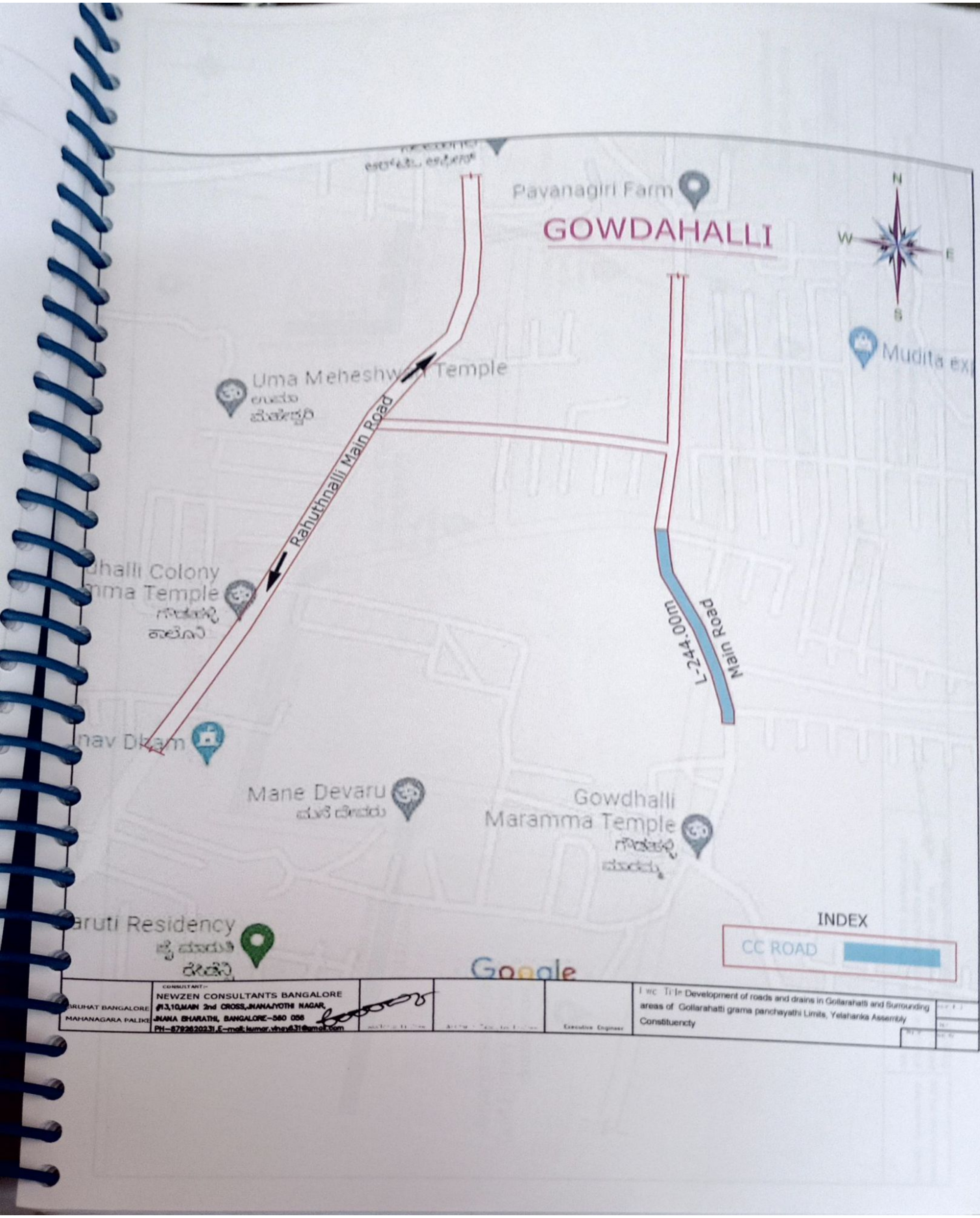

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CLIENT BRUHAT BANGALORE MAHANAGARA PALIKE	NEWZEN CONSULTANTS BANGALORE #13,10,MAIN 2nd CROSS,JNANAJYOTHI NAGAR, JNANA BHARATHI, BANGALORE-560 056 PH-8792620231,E-mail;kumar.vinay631@gmail.com				Development of roads and drains in Gollarahatti and Surrounding areas of Gollarahatti grama panchayathi Limits, Yelahanka Assembly Constituency

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GIDDENAHALLI

eya swami temple

Vinaya

Lakshminarshimaiah House Road

L-375.00m

INDEX

CC ROAD

Lakshmi Temple

BRUHAT BANGALORE MAHANAGARA PALIKE	CONSULTANT:- NEWZEN CONSULTANTS BANGALORE #13,10,MAIN 2nd CROSS,JNANAJYOTHI NAGAR, JNANA BHARATHI, BANGALORE-560 056 PH-8792520231,E-mail;kumar.vinay631@gmail.com			Executive Engineer	Development of roads and drains in Srinidhi Layout, Balaji Layout, MNK Layout and Surrounding areas of Kadabagere grama panchayathi Limits, Yelahanka Assembly Constituency

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